K A N S A S

DEPARTMENT OF HEALTH AND ENVIRONMENT
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EXPOSURE CONTROL PLAN
2003

DIVISION OF HEALTH
Bureau of Epidemiology and Disease Prevention
Epidemiologic Services Section

EXPOSURE CONTROL PLAN 2003

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Section I - Introduction

The Occupational Safety and Health Administration's (OSHA) Rule 29 CFR 1910.1030 (Appendix A) on bloodborne pathogens became effective March 6, 1992 and revisions were published January 18, 2001 to the "Federal Registers Occupational Exposure to Bloodborne Pathogens; Needlestick and Other Sharps Injuries; Final Rule. - 66:5317-5325 (Appendix B). The purpose of the standard is to protect employees by limiting occupational exposure to blood and other potentially infectious materials (OPIM) since exposures could result in transmission of blood borne pathogens that could lead to disease or death. Private health-related employers are required to implement the standard and will be *cited* by OSHA if they are not in compliance. In accordance with K.S.A. 44-636 as administered by the Industrial Safety and Health Section of the Kansas Department of Human Resources, public sector employers must also be in compliance with OSHA's rule concerning blood-borne pathogens.

In accordance with the OSHA Blood Borne Pathogens Standard referenced above, the following exposure control plan has been developed for employees of the Kansas Department of Health and Environment (KDHE).

A. Purpose

The purposes of the plan are to eliminate or minimize employees' exposure to health hazards associated with blood and blood borne pathogens, and to provide treatment and counseling should a potential or actual exposure occur.

B. Scope

The plan covers all employees who could be "reasonably anticipated" to experience contact with blood and other potentially infectious materials (OPIM) as the result of performing their job duties.

Section II - Management of the Plan

A. Responsibilities

There are four groups of persons responsible for management of the exposure control plan. These groups are:

Management

Exposure Control Plan Committee,

Supervisors,

Training Instructors, and Employees.

Adherence with OSHA directives pertaining to employees who are on contract with outside agencies (i.e., county health departments) will be the responsibility of the outside contracting agency. Contract employees on State property are subject to State regulations. Upon request, contract agencies will provide documentation of compliance for employees working at/with state agencies.

The Exposure Control Plan Committee (ECPC) will be responsible for developing the plan and obtaining approval of all policies and procedures from the Secretary of Health and Environment. Other duties include updating the plan as needed, assisting supervisors in auditing their employees for compliance with the plan, reviewing evaluations of sharps injury protective devices, and exposure incidents to develop engineering controls and work practices as needed to reduce incidents. The ECPC will meet annually or as needed, in order to carry out its responsibilities.

The ECPC will consist of: the Director of the Division of Health; the Director of the Division of Environment; the Director of the Kansas Health and Environmental Laboratory; the Director of Human Resources Management; the Director of the Bureau of Epidemiology and Disease Prevention (the State Epidemiologist); and the Administrator of the DHR Occupational Health and Safety Section. When unable to attend a meeting, a committee member should appoint a designee to attend in his/her place. Appointment of such a designee should take into consideration the need for continuity on the committee.

The Secretary of Health and Environment will review, sign, and issue the plan to all divisions affected by the plan.

Supervisors are responsible for implementing the exposure control plan in their respective sections. Activities related to this responsibility include:

- Assisting educators in training employees on the OSHA standard and the exposure control plan.
- Maintaining an up-to-date list of employees requiring training and maintaining training records.
- Scheduling annual training updates.
- Reviewing department policies and procedures that place the employees at risk for exposure and submitting revisions to the ECPC.
- Monitoring employees for compliance in following the exposure control plan, documenting noncompliance, and counseling employees appropriately.
- Reporting exposures to the Director of Human Resources Management to be recorded on workman compensation forms, referring employees for immediate exposure follow-up, and coordinating 6 month follow-up exams.
- Reporting device evaluation activities according to the evaluation criteria (See Appendix C)

The training instructors and supervisors of employees affected by the plan will provide the OSHA-required training with unit specific policies to employees. These training programs will be given to all new employees before an employee is assigned to tasks where occupational exposure may occur. All employees in Class A or B positions with occupational exposure (See Appendix D1) will receive training on blood borne pathogens, including but not limited to the human immunodeficiency virus (HIV), and the hepatitis B virus (HBV), and the hepatitis C virus (HCV).

When candidates for Class A or B positions with occupational exposure are being interviewed for employment, the supervisor of the potential employee will inform the candidates of the occupational risk involved with the position. Upon employment, the employee must be provided task-specific training before assignment to tasks that place the employee at risk of exposure to blood borne pathogens. The employee is required to attend the blood borne pathogen in-service

and pass a test. An employee is required to know where the exposure plan is located, to follow the exposure plan, and to report any exposures promptly to his or her supervisor. If personal protective equipment needs cleaning or replacement, department directives should be followed.

B. Location of the Plan

A copy of this plan will be located in an accessible area for all employees. Employees will be advised of the location of the plan during orientation and training sessions.

C. Review and Update of the Plan

The Exposure Control Plan Committee will review and revise the exposure control plan:

Annually, or

When new OSHA regulations need to be added to the plan, or

When new positions are established or new tasks implemented that affect occupational exposure for employees, or

When new departments are added that may involve procedures having occupational exposure to blood borne pathogens.

Section III - Exposure Determination

OSHA requires employers to perform an exposure determination to identify employees that may incur occupational exposure to blood or other potentially infectious materials as a consequence of the performance of their job duties (See Appendix D2). The exposure determination is made without regard to the use of personal protective equipment. Each Supervisor will be responsible for classifying each of their employees in relation to their potential occupational exposure. The Supervisor may consult with Human Resources Management, the appropriate Division Director, or the Epidemiologic Services Section of the Bureau of Epidemiology and Disease Prevention as

needed in order to determine such classification. All job positions will be classified as one of the following:

Class A.	Jobs in which all employees have occupational exposure.
Class B.	Jobs in which some employees have occupational exposure.
Class C.	Jobs in which no employees have occupational exposures.

This classification will be incorporated into each job description for which the employee is determined to be at risk of exposure. Supervisors will be responsible for notifying Human Resources Management when job duty changes result in changes in risk level, or when new positions are created that involve risk of exposure.

A current list of all position classifications that involve risk of exposure is maintained by Human Resources Management and is included in this document as Appendix D1.

Section IV - Methods of Compliance

The OSHA standard mandates engineering controls, work practices, and the use of personal protective equipment to reduce risks of exposure to blood borne pathogens. The following OSHA definitions explain these key elements:

- Engineering controls are controls that isolate or remove the blood borne pathogens hazard from the workplace including safer medical devices, such as sharps with engineered sharps injury protections and needleless systems, sharps disposal containers and biological safety cabinets.
- Sharps with engineered sharps injury protection (SESIP) — "a non-needle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident
- Needleless systems –a device that does not use needles for: (A) the collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (B) the administration of medication or fluids; or (C) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.
- Work practices are controls that reduce the likelihood of exposure by altering the manner in which a task is performed (i.e., prohibiting recapping needles by a two-handed technique).
- Personal protective equipment is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes are not intended to function as protection against a hazard and are not considered to be personal protective equipment.

A. Universal Precautions

All Class A and B employees in KDHE will observe universal precautions to prevent contact with blood or other potentially infectious materials (OPIM). "Universal precautions" refers to an approach to infection control that requires employees treat all human blood and OPIM as if known to be infectious for HIV, HBV, HCV or other blood borne pathogens. Every person must

be treated the same in that many asymptomatic, undiagnosed persons carry HIV, or HBV, and/or HCV and can transmit disease to health care workers through needle sticks or through broken skin or mucus membrane exposure to blood or OPIM.

The following materials are considered to be potentially infectious materials:

Blood and blood Products

Body fluids:

Semen

Vaginal secretions

Pleural fluid

Pericardial fluid

Peritoneal fluid

Synovial Fluid

Amniotic Fluid

Saliva*

Breast milk**

Any body fluid that contains blood (i.e., stool/emesis streaked with blood)

Any unfixed organ or tissue (other than intact skin) from a human (living or dead).

HIV containing cell or tissue cultures, organ cultures, and HIV, or HBV, or HCV containing culture medium or other solutions; and blood, organs, or other experimental animals infected with HIV, or HBV, or HCV.

* Saliva is considered infectious by OSHA only in dental settings, however, KDHE recognizes the risk of transmission of hepatitis B, herpes simplex, and other pathogens in saliva and considers saliva as potentially infectious.

** Breast milk does contain small amounts of HBV and HIV and has been documented to transmit disease. KDHE considers breast milk as potentially infectious even though the risk is small and OSHA does not recognize it as a potentially infectious fluid.

The following recommendations for universal precautions were issued by CDC on August 21, 1987 and revised in 1988.[i]

Universal precautions recommendations:

- All health care workers should routinely use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or other body fluids of any patient is anticipated. These barriers include gloves, masks, protective eyewear, gowns or aprons according to risk of exposure for the employee.
- Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after gloves are removed.
- All health care workers should take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during procedures; when cleaning used instruments; during disposal of used needles; and when handling sharp instruments after procedures.
- Although saliva has not been implicated in HIV transmission, to minimize the need for emergency mouth-to-mouth resuscitation, mouthpieces, resuscitation bags, or other ventilation devices should be available for use in areas in which there may be a need for resuscitation.
- Health care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care and from handling patient-care equipment until the condition resolves.
- Pregnant health care workers are not known to be at greater risk of contracting HIV infection than health-care workers who are not pregnant; however, if a health-care worker develops HIV infection during pregnancy, the infant is at risk of infection resulting from perinatal transmission. Because of this risk, pregnant health care workers should be

especially familiar with and strictly adhere to precautions to minimize the risk of HIV transmission. Pregnant laboratory employees are to report a possible or confirmed pregnancy to their supervisor according to the laboratory safety policy.

B. Engineering Controls

Engineering controls help protect employees. These controls must be examined and maintained on a regular schedule.

For employees of the Division of Health who use needle boxes when performing finger, arm or heel sticks, needle boxes should be sealed and disposed of monthly or sooner if full. Needle boxes used in local health departments will be maintained and supervised by the local health department. Employees are responsible for knowing and following engineering controls in local health departments.

For laboratory engineering controls, the responsible supervisors and maintenance schedules are outlined in the laboratory manual.

C. Hand washing

To decrease the number of microorganisms on hands and prevent the spread of infection, hand washing will be performed by employees.

In the absence of a true emergency, personnel should always wash their hands:

- Before taking care of patients, when arriving at the worksite, before invasive procedures, and before all contact with immunosuppressed patients.
- After direct care that involves skin contact with patients.
- After removal of gloves.
- After situations during which microbial contamination of hands is likely to occur (i.e., handling used alcohol wipes after injections).
- Before eating, before smoking, after leaving patient areas, and after using the bathroom.

- After touching inanimate objects that are likely to be contaminated (i.e., workbenches where specimens are placed).
- Anytime that hands or other skin surfaces are contaminated with blood, body fluids containing visible blood, or other body fluids to which universal precautions apply (1,3).

Hand washing facilities are required to be available to employees who incur exposure to blood or OPIM. The Kansas Health and Environmental Laboratory (KHEL) has eyewash sinks and hand washing sinks available in each department. These are listed in the laboratory procedure manual.

When the employees of KDHE are assisting with patient care in the field at health departments, employees will seek out the health department's hand washing facilities before patient care occurs.

When KDHE field representatives draw blood or have other patient contact, employees will use sinks in the patient's home if possible. If a sink, soap, and towel are not available then the use of a waterless antiseptic soap substitute may be used. Employees then must wash their hands with soap and running water as soon as feasible. OSHA requires a listing of locations for waterless soap substitutes, tasks requiring substitutes, and supervisors responsible for substitutes. The following table contains this information.

Table 1 – Handwashing substitute location, task, and responsible person

Location of Soap Substitute	Task	Supervisor
Field packet	Blood draws	STD program manager
Field packet	Blood draws	IMM program manager
Field packet	Blood draws	AIDS program manager
Field packet	TB skin test	TB program manager
Laboratory sink cupboard	Emergency handwashing	Chief of services

D. Needle Safety and Sharps Containers

Because needle sticks occur when recapping is performed, contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken. If recapping is not avoidable the recapping or removal of the needle must be done by the use of a mechanical device or a one-handed technique.

Puncture resistant sharps containers should be available whenever it is anticipated that an employee may need to perform a venipuncture or capillary stick. However, if while in the field, a public health nurse/employee finds herself/himself in a situation where the local health department or other facility has no sharps container available in the setting, the nurse/employee may scoop the used needle into the hub of the syringe that is on a flat surface then transport the used syringe to the nearest sharps container. Disposable needles and sharps will be disposed of immediately into an appropriate sharps container after use.

Contaminated reusable sharps shall be placed in appropriate containers until properly reprocessed. At the current time, no reusable sharps are used by employees of the Kansas Department of Health and Environment.

The location, disposal and maintenance of sharps containers are listed under Engineering Controls, Section IV (B). Disposable sharps containers are closeable, puncture resistant, leakproof, labeled with a biohazard sign, and sealed before removal for processing (incineration or autoclaving prior to disposal in a sanitary landfill).

Use and Evaluation of *Sharps with Engineered Sharps Injury Protections* (SESIP):

With exception of the KHEL and STD DIS employees must use the technologies available in the settings where they work. The KHEL does purchase needles and syringes for use in the laboratory in transfer of isolates from medium to medium or to slides, etc. Needleless systems are not appropriate for these laboratory procedures. Whenever needleless systems or sharps with engineered sharps injury protections are available for such procedures, employees should use the safer technologies. According to the 2001 revisions (Appendix B) annual review of SESIP technologies will be reported in the annual plan. The review of these devices will include input and participation by non-supervisory staff members. A review (Appendix C) will include at least: the brand name of the device, the evaluation method, the persons involved in the

evaluation, the assessment and justification for the decision to accept or reject the product. Additional information may be requested to clarify the impact of potential change and decision-making.

E. Work Area Eating Restrictions

In work areas where there is a reasonable likelihood of exposure to blood or OPIM employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or OPIM are present.

Mouth pipetting and suctioning of blood or OPIM is prohibited.

All procedures will be conducted in a manner that minimizes splashing, spraying, splattering, and generating of droplets of blood or OPIM. Methods employed in the laboratory are listed in the laboratory procedure manual.

F. Specimen Acquisition and Handling

Specimens of blood or OPIM will be placed in a container that prevents leakage during collection, handling, processing, storage, and transport. Gloves will be used to handle specimens for transport or receiving. The containers used for this purpose will be labeled or color-coded. For staff who must draw field bloods or obtain other specimens, specimens will be placed in the state laboratory mailer that has a biohazard sign and is durable and leak-proof.

Inside the laboratory all specimens will be handled using universal precautions. All specimens that are mailed out of the laboratory will be placed in a leak-proof container packaged and shipped according to shipper's requirements (i.e., US Postal Service)

G. Contaminated Equipment

Equipment that has become contaminated with blood or OPIM shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible.

(There is no equipment used by KDHE that cannot be decontaminated and/or repaired by KDHE personnel.)

H. Personal Protective Equipment

All personal protective equipment used at KDHE will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or OPIM. The protective equipment will be considered appropriate only if it does not permit blood or OPIM to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the protective equipment will be used.

Protective equipment will be provided to employees by their immediate supervisor. The equipment necessary for different tasks is listed in Appendix E1.

Personal protective equipment will be cleaned, laundered, and disposed of by the KDHE at no cost to the employee. All repairs and replacements will be made by the employer at no cost to the employees.

ANY garments that are penetrated by blood shall be removed immediately or as soon as feasible. Employees should remove clothing in a manner that protects against contact with the outer surface (i.e., roll up the garment as it is pulled toward the head, keeping soiled area pulled away from mucus membranes of eyes, nose, and mouth). If a field employee is not in a health department he/she should keep a change of clothes in his/her vehicle then change clothes and wash exposed body parts as soon as possible. Soiled clothes will be placed in a plastic bag, and returned to his/her supervisor for laundering.

If an employee lives at a distance, employee is to call supervisor to inform supervisor of need to launder clothes. Employee will submit laundry in a plastic bag labeled "Blood/Body Fluid

Precautions" to local laundry. For reimbursement, a copy of the laundry receipt should be submitted by the employee with a completed expense sheet.

Lab Coats, Gowns and Plastic Aprons - All personal protective equipment (PPE) will be removed prior to leaving the work area. Lab coats, scrubs, and plastic aprons are used by certain laboratory employees. The laboratory procedure manual contains a table that shows placement of PPE and the person responsible for distribution, cleaning, and monitoring of PPE.

Public health nurses/employees may have need for a lab coat, gown or apron, but this would be in a health department or clinic situation where these items can be provided. The individual should reimburse the county health department or clinic for items, obtain a receipt, then place PPE costs on travel voucher. Reimbursement will be issued to the employee with travel expenses.

Gloves - Gloves shall be worn when it is reasonably anticipated that employees will have hand contact with blood, OPIM, non-intact skin, or mucous membranes. Gloves must fit the work assignment. Latex or vinyl disposable gloves are acceptable for patient care or laboratory duties. Disposable gloves shall be replaced as soon as possible when visibly soiled, torn, punctured, or when their ability to function as a barrier is compromised. Gloves should not be washed or disinfected for re-use. Heavier duty general-purpose utility gloves (i.e., rubber household gloves) should be used for housekeeping chores involving potential blood contact and for instrument cleaning and decontamination procedures. Utility gloves may be decontaminated and reused but should be discarded if they are peeling, cracked, or discolored, or if they have punctures, tears, or other evidence of deterioration. See Appendix E1 for tasks that require glove use.

If an employee requires a smaller or larger size glove or develops an allergy to the current gloves provided to employees, KDHE provides the appropriate size gloves or powderless gloves or glove liners for employees with allergies. It is the responsibility of the employee to report glove problems to their immediate supervisor for appropriate equipment and work assignment.

The Division of Health provides disposable gloves to staff who practice in the field. Gloves are located in individual bureau storerooms. When public health nurses/employees or field staff

practice in local health departments, they must locate the glove boxes before providing patient care.

The state laboratory supplies disposable gloves in each laboratory. The person responsible for placement and location is listed in the laboratory procedure manual.

Masks, Respirators and Protective Eyewear - Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin length face shields, are required to be worn whenever splashes, spray, splatter, or droplets of blood or OPIM may be generated and eye, nose, or mouth contamination can reasonably be anticipated.

In the Division of Health the only public health nurse/employee who uses respiratory protection routinely is the TB public health nurse. The TB public health nurse uses disposable N95 particulate respirator at all times she is at risk of contact with an active TB case. The respirator will be disposed of in the regular trash when it becomes soiled. Other persons who may have contact with person who have active TB (i.e., AIDS field representative seeing an active TB patient) are also required to follow OSHA guidelines for occupational exposure to TB, and wear a disposable N95 particulate respirator [vi].

The state laboratory requires use of biological safety cabinets for persons working with AFB cultures and other potentially airborne pathogens. The newborn screening laboratory uses masks for certain procedures. See Appendix E1 for tasks.

Resuscitator devices - Resuscitator devices are to be readily available and accessible to employees who can reasonably be expected to resuscitate a patient. Emergency ventilation devices also fall under the scope of PPE and hence must be provided by the employer for use in resuscitation. Improper use of these devices, includes failure to follow the manufacturer instructions and/or accepted medical practice and shall be cited as a violation.

Because no direct care is administered on the premises of KDHE, no resuscitator devices are present. During field work, public health nurses/employees and field representatives have access to resuscitator devices available in health departments. Due to the danger of anaphylaxis from drug reactions it is the responsibility of public health nurses/employees and field representatives to locate such devices before administering medications. Reimbursement will be made to the individual who pays for a device, provides a receipt, and lists it on a travel voucher.

Caps and Booties - Surgical caps or hoods and/or shoe covers or booties shall be worn in instances when gross contamination can reasonably be anticipated. Surgical caps are used in the newborn screening lab as this allows adjustment of masks without contamination to the employee's hair.

OSHA states that "the employer shall ensure that the employee uses appropriate personal protective equipment unless the employer shows that the employee temporarily and briefly declined to use personal protective equipment when under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care, of public safety services or would have posed an increased hazard to the safety of the worker or co-worker. When the employee makes this judgment, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future".

I. Housekeeping

Routine Cleaning - KDHE will maintain a clean, safe, and sanitary worksite. When KDHE does not contract for housekeeping services, supervisors will be responsible for determining and implementing an appropriate written schedule for cleaning and method of decontamination based upon the facility purpose, type of surface cleaned, soil present, and tasks or procedures being performed in the area.

Cleaning Areas with blood and OPIM - The only KDHE area where blood and OPIM are present is the state laboratory. The laboratory has established cleaning schedules and names of the disinfectants utilized in the laboratory procedure manual. This schedule includes routine cleaning schedules for bins, pails, cans, and similar receptacles intended for reuse that have a reasonable likelihood of becoming contaminated with blood or OPIM.

Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of a procedure; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or OPIM; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

The method to clean up blood and OPIM is:

- Don gloves and spray spill with disinfectant.*
- Remove visible material with disposable towels or other appropriate absorbent materials, place in plastic bag, and secure bag.
- Disinfect area with bleach solution or EPA-registered disinfectant that kills HBV, HCV, and HIV.
- Remove gloves and wash hands.

* If spill is large, other protective equipment may be necessary (i.e., waterproof gown, protective eyewear, booties). If bagged waste drips, red bag and label with biohazard sign and dispose of accordingly.

Protective coverings are used in serology and newborn screening to cover environmental surfaces. These protective coverings are removed daily and autoclaved before being discarded.

Management of Broken Glassware - Broken glassware that may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means such as a brush, tongs or forceps, and a dustpan. Broken glass will be placed in a sharps container. Tools used for clean-up will be disinfected with a bleach solution diluted 1:10 with water or an EPA-registered disinfectant that kills HBV, HCV, and HIV.

In the laboratory, special broken glass containers are located in central service and immediately outside the laboratory on the third floor.

J. Regulated Waste

Regulated medical waste in Kansas is governed by K.A.R. 28-29-27. Medical services waste refers to solid waste materials that are potentially capable of causing disease or injury and that are generated in connection with human or animal care through inpatient and outpatient services. Medical waste is found at the state laboratory. The following items are considered infectious medical waste: microbiology laboratory waste, pathology waste, blood specimens or blood products, and needles and sharps contaminated with blood or OPIM. Solid waste from animals is not covered in the OSHA standards unless animals are used in an HIV, HCV, or HBV research laboratory.

The state laboratory follows K.A.R. 28-29-27 for the segregation, storage, collection, transportation, and processing of medical services waste. The state laboratory procedure manual outlines the methods of storage, transport, and method of disposal. Regulated waste that has been decontaminated need not be labeled or color-coded.

Personnel involved in the handling and disposal of infective waste will be informed of the potential health and safety hazards via the OSHA mandated education presentation and trained in the appropriate handling and disposal methods.

Infective waste awaiting disposal will be picked up and stored in an area accessible only to personnel involved in the disposal process.

K. Laundry

Laundry contaminated with blood or OPIM will be handled as little as possible. The only clothing needing laundering is located at the state laboratory. Laundry (lab coats used as PPE or employees clothing that has been splashed) will be placed in appropriately marked bags at the laboratory. Wet contaminated laundry with a reasonable likelihood of soak-through or leakage from the bag will be placed and transported in a red plastic bag to prevent leakage. This laundry will not be sorted or rinsed in the area of use. Home laundering is not permitted since KDHE can not guarantee that proper handling or laundering procedures are being followed and OSHA requires employer laundering.

Areas where a lab coat is considered PPE and the locations for laundry pickup and delivery, are listed in the laboratory procedure manual.

Laundry at the laboratory will be cleaned at Continental Laundry, 412 SW Jackson, Topeka. Continental Laundry has been notified of the nature of the laundry. Laundry is red bagged and the laundry contract states that the employer is responsible for following the OSHA blood borne pathogen directives for employees handling KDHE red bagged linen.

Section V - Hazard Communication

A. Labeling

OSHA requires the universal biohazard label be used for certain contaminated items and waste. This label is fluorescent orange with lettering or symbols in a contrasting color. Labels must be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

The items that require the biohazard label are:

- containers of regulated infectious waste,
- refrigerators and freezers containing blood or other potentially infectious material,
- containers used to store, transport, or ship blood or OPIM,
- contaminated equipment being sent for repair or maintenance (an extra label must state which portion of the equipment remains contaminated)

Items that do not require the biohazard label are:

- red bags or red containers (red bagging is an acceptable OSHA substitute),
- containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use,
- individual containers of blood or OPIM that are placed in a labeled container during storage, transport, shipment or disposal,
- regulated waste that has been decontaminated.

Labeling of items will be the responsibility of the supervisor of the area. The laboratory manual states the requirements for labeling. Field representatives who draw blood will utilize the state laboratory mailer for field bloods. This mailer has the biohazard sign that indicates infectious materials.

B. Signs

A biohazard sign is required to be posted on HIV, HCV, and HBV research laboratories. Because the KDHE laboratory is not a research facility, no biohazard sign must be posted on the entrance to the laboratories.

Section VI - Employee Education

KDHE Human Resources Management will coordinate with KDHE supervisors to ensure that all Class A and B employees with occupational exposure participate in a training program that must be provided at no cost to the employee and provided during working hours. This training will be for all Class A and B employees initially upon hiring, then annually. New Class A and B employees will receive training before initial assignment to tasks where occupational exposure may occur. In addition to annual training, all Class A and B employees with occupational exposure will be provided additional training if a new task or procedure affects the employee's occupational exposure.

Training will be conducted by the Supervisor of the employee. The Supervisor may consult with Human Resources Management, the Epidemiologic Services Section (ESS) or the Bureau for Disease Prevention and Health Promotion for purposes of assuring appropriate content of the training. The ESS and Human Resources Management will be responsible for providing training to the supervisors, as needed, in all aspects of implementation of the BBP Exposure Control Plan, including the provision of specific training for the employees at risk. Video tapes, lecture, and discussion may be used to educate employees.

Training for employees will include an explanation of the following:

- overview of the OSHA standard for blood borne pathogens and the location of the standard for review as needed;
- epidemiology and symptoms of blood borne diseases;
- modes of transmission of blood borne pathogens,
- KDHE exposure control plan and the means by which employees can obtain a copy of the plan;

- procedures that may involve exposure to blood and OPIM;
- control measures to prevent exposure to blood and OPIM including engineering controls, work practices, and PPE;
- information on the types, selection, proper use, location, removal, handling, decontamination and disposal of PPE;
- pre-exposure hepatitis B vaccination program including information of vaccine efficacy, safety, method of administration, and benefits of being vaccinated;
- post exposure reporting, medical evaluation, and follow-up; and
- hazardous labels and signs used by KDHE.

Employees will have an opportunity to ask questions at the training session. Employees who are only proficient in a foreign language or have a disability will have information conveyed by an interpreter or by an appropriate method of education for their disability.

Training records will be maintained for three years from the date on which the training occurred and include the following:

- date of training session,
- summary of training session,
- names and qualification of persons conducting the training, and
- names and job titles of all persons attending the training session.

The forms in Appendix F (or equivalent forms specific to the organizational unit) may be used to document group training sessions. An individual(s) providing group training under the aegis of this plan should document the participation of each employee (including supervisors of employees' with risk) by written communication to the employee's supervisor, the employee, and to Human Resources Management. When supervisors of employees' with risk provide annual training to those employees on an individual basis, training will be documented in writing to Human Resources Management and the employee.

Section VII - Hepatitis B Vaccination

All KDHE employees will be offered the hepatitis B vaccine at no cost to the employee. The employee will be offered the vaccine after training and within 10 working days of their initial work assignment that involves the potential for occupational exposure to blood or OPIM. The employee may decline the vaccination for various reasons i.e. previously vaccinated, medical contraindications, documentation of immune status, or choice.

The employee will sign the appropriate declination statement (Appendix G1 and Appendix G2). If the employee later chooses to have the vaccination it will be provided at no cost.

The Supervisor will arrange hepatitis vaccination times with the contracting agency., refer them to the contracting agency for injections, or obtain the waiver. KDHE has negotiated with the Shawnee County Health Department Agency (SCHA) to provide the vaccine to its employees and maintain appropriate records for whom it is indicated. It will be the responsibility of the Supervisor to offer the vaccine to new employees and to arrange for the employee to receive it. The procedure for obtaining the vaccine for the employee is as follows:

Contact the Immunizations Program of the SCHA at 785-368-2135 and schedule an appointment for the employee.

Prepare a purchase order with SCHA as vendor and KDHE (with your Bureau/Section/Program) as purchasing agent.

Prepare a brief memo on KDHE letterhead addressed to the SCHA Immunizations Program to be taken by the employee with the purchase order to the SCHA at time of the appointment. The memo should address following issues:

Identify the employee as a KDHE employee;

Clarify that the purpose of the visit is for the employee to receive a hepatitis B vaccine dose;

Clarify that KDHE will reimburse the SCHA for all costs of the service as per the accompanying purchase order; and

Request that the SCHA provide KDHE with documentation that the dose was administered for the employee's KDHE medical record.

C. Repeat the process for each dose of vaccine.

Section VIII - Post Exposure Evaluation and Follow-up

An exposure is defined as: a specific eye, mouth, other mucous membrane, parenteral, or non-intact skin contact (including intact skin when exposure is prolonged, involves extensive surface area of the skin, involves large quantities of the potentially infectious material, or involves material known to be infected with high titers of virus) with blood or other potentially infectious materials (OPIM) resulting from the performance of an employee's duties (refer to Appendix D2). The steps in an exposure evaluation and follow-up are:

A. Documentation of exposure

When an employee incurs a possible exposure, the employee will report the incident to his/her immediate supervisor immediately. The supervisor will judge whether a true blood or body fluid exposure has occurred. If there is a question of true exposure, the Epidemiologic Services Section (785-296-2951 daytime; pager number 785-357-5683 nights and weekends) will be consulted for final determination. If a true exposure has occurred, the supervisor will arrange for the employee to receive medical evaluation (See B below) without delay, preferably within one hour (See Appendix H1 & H2 - Post exposure Prophylaxis Recommendations). After medical attention has been arranged for the employee, the supervisor will contact Human Resources Management to report the incident. The supervisor will also complete an Employer's Report of Accident form 1101-A (see Appendix I) and submit it to Human Resources Management as soon as possible to comply with Worker's Compensation injury reporting requirements. If the

exposure is due to a sharps injury, the supervisor will assure that the 1101-A form includes the following information:

Setting
Program
Job working title of injured employee
Procedure
Type of device (vacutainer, etc.)
Brand name of device
Description of incident

Forward the completed form to Human Resources Management where it will be retained in a separate file named the "Sharps Injury Log." This latter procedure is not required for sharps injuries in which the sharp is not contaminated and for which the incident does not meet the definition of an exposure.

B. Referral and care of employee: The Epidemiologic Services Section (785-296-2951, daytime; pager number 785-357-5683, nights and weekends) will be available to the supervisor for consultation with regard to the medical aspects of the process described below.

All employees who incur an exposure will have post exposure evaluation and follow-up in accordance with the OSHA standard and CDC recommendations (see Appendix J). Follow up will be provided by the appropriate contract health care provider (see Appendix K for list of contract health care providers by region). This contractor will be given copies of the OSHA standard and the current public health recommendations The guidelines in Appendix H are in accordance with the recommendations in the following documents: (1) CDC. *Protection against viral hepatitis: recommendations of the Immunization Practices Advisory Committee*. MMWR 1990;39(RR-2):1-25;[ii] and (2) CDC. *Public Health Service Guidelines for the Management of*

Health-Care Worker Exposures to HIV and Recommendations for Post exposure Prophylaxis. MMWR 1998;47(RR-7):1-34.[iii] The latter document supercedes the two previous documents on the same subject: *Public Health Service statement on management of occupational exposure to human immunodeficiency virus, including considerations regarding zidovudine post exposure use;*[iv] and *Update: Provisional Public Health Service Recommendations for Chemoprophylaxis after Occupational Exposure to HIV*.[v]

Follow up will be provided by the appropriate contract health care provider (see Appendix I for list of contract health care providers by region). If the distance to one of these providers is excessive, the employee should present to the nearest hospital emergency room. Use of private physicians for this purpose may be problematic because private physicians may not have reimbursement agreements in place with the Workman's Compensation Program. Hospitals are more likely to have such agreements in place and they are more likely to be experienced in providing post-exposure evaluation and treatment.

When the supervisor arranges for the employee to receive evaluation and treatment, in order to facilitate the process, the health care provider should be advised that: (1) the patient is a State of Kansas Employee; (2) the medical care to be provided is for an occupational injury that is covered by the State Workman's Compensation Program; and (3) the injury is a potential blood borne pathogen exposure that should be evaluated and treated just as the hospital would evaluate and treat one of its own employees who had incurred such an occupational injury. When an exposure occurs, the supervisor will also provide the health care provider with information relevant to the incident including; circumstances and route of exposure, the employee's hepatitis B vaccination status, and other relevant medical information. If possible, the supervisor will

obtain the identity; HBV, HCV, and HIV risk level; and HBV, HCV, and HIV sero-status of the source person (refer to Appendix J) and provide this information to the health care provider. If the source blood is at the state laboratory, the blood of the source individual will be tested for HIV, HCV, and HBV only after consent for testing and release of information is obtained (there is no provision in Kansas law for testing a patient or release of testing results without consent). It will be the responsibility of the supervisor to notify the source individual, obtain permission slips, obtain additional blood if necessary, and return signed consent forms and blood to the virology lab. The supervisor may request assistance with these tasks from the health care provider or the local health department. However, ultimate responsibility for carrying out these measures falls to the supervisor.

If public health nurses or field staff experience an exposure in the field, the source patient's blood will be drawn for HIV, HCV, and HBV by appropriate local health department staff, if the source patient consents. Blood will then be sent to the state laboratory for testing.

The health care provider will evaluate the exposure incident and provide counseling before tests are run and also counseling concerning precautions to take during the period after the exposure incident. The employee will be given information on what potential illnesses to be alert for and to report any related illnesses to the health care provider.

The health care provider will arrange for testing of the employee for HBV, HCV, HIV, and other tests as deemed necessary. If the employee does not wish immediate testing, the employee will be offered the option of donating a blood specimen for later testing. The blood sample will be preserved for at least 90 days to allow the employee to decide if the blood should be tested.

The health care provider will provide post-exposure prophylaxis in accordance with CDC recommendations as summarized in Appendix H, and will notify the employee of all test results. The exposed employee will be instructed to maintain the confidentiality of the source patient's name and sero-status according to Kansas law.

The health care provider will also evaluate any reported illness that may stem from the exposure incident.

KDHE Human Resources Management will obtain and provide the employee with a copy of the health care provider's written opinion within 15 days of the completion of the evaluation. This opinion will be limited to the following information:

- documentation that the employee has been informed of the results of the evaluation
- any medical conditions resulting from exposure to blood or OPIM that require further evaluation or treatment.
- All other findings or diagnoses shall remain confidential and shall not be included in the report.

C. Maintenance of medical records

The health care provider will maintain confidential, locked employee medical files for the duration of employment plus 30 years. Human Resources Management will inform the health care provider when an employee resigns or retires.

A separate locked file will be maintained by Human Resources Management for KDHE employees who have an occupational exposure. Files will be confidential and will not be disclosed to any person without the employee's *express* written consent except as required by Kansas law. These records will be maintained for duration of employment plus 30 years. The KDHE Human Resources Management will establish and maintain an accurate record for each

employee with an occupational exposure in accordance with the OSHA standard. This record will include:

- name and social security number of employee,
- copy of employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and medical records relevant to the employee's ability to receive vaccination,
- copy of all results of examinations, medical testing, and follow-up procedures
- copy of the health care provider's written opinion about the exposure, and
- copy of the information provided to the health care provider when the employee was sent for exposure assessment and care.

Section IX - Record Keeping

The following records will be maintained by KDHE:

- training records,
- hepatitis B vaccination records,
- incidents of noncompliance with exposure control plan, and
- exposure incidents and medical follow up.,
- completed Sharps Injury Exposure Report Forms

Location and duration of record keeping:

- employee education training records will be maintained for 3 years from the time of training,
- hepatitis B vaccination records will be kept in Human Resources Management in a locked file for duration of employment plus 30 years,
- counseling in regard to non-compliance will be documented according the Kansas Personnel Policies regarding positive discipline utilizing an oral reminder, written reminders, then decision-making-leave with continued non-compliance. Supervisor Training Manual, Section Problems, pages 7 and 8 explains how to counsel employees. Civil Service Guidance and Discipline is found in the following regulations: Kansas Regulation 1-10-6; Kansas Regulation 1-10-7; Kansas Regulation 1-10-8. (Copies of these regulations are found in Supervisor Training Manual, Personnel Issues Section),
- all exposure incidents, follow up consultation, and recommendations will be maintained by Human Resources Management for duration of employment plus 30 years.
- Sharps Injury Exposure Report Forms will be retained by Human Resources Management in the Sharps Injury Log for duration of employment plus 30 years.

Section X - Dates Exposure Plan Implemented

The OSHA standard became effective March 6, 1992. KDHE became part of the Kansas public system to recognize and follow the spirit and intent of this standard on April 27, 1992. Information and training, and record keeping shall take effect on or before August 15 annually.

Plan Revisions: February 15, 1993
December 13, 1993
June 15, 1995
November 20, 1997
December 17, 1998
March 8, 1999
March 1, 2000
April 1, 2001
October14, 2003

i. CDC. Update: universal precautions for prevention of transmission of human immunodeficiency virus, hepatitis B virus, and other blood borne pathogens in health-care settings. MMWR 1988;37(24):377-88.

ii. CDC. Protection against viral hepatitis: recommendations of the Immunization Practices Advisory Committee. MMWR 1990;39(RR-2):1-25.

iii. CDC. Public Health Service Guidelines for the Management of Health-Care Worker Exposures to HIV and Recommendations for Postexposure Prophylaxis. MMWR 1998;47(RR-7):1-34.

iv. CDC. Public Health Service statement on management of occupational exposure to human immunodeficiency virus, including considerations regarding zidovudine postexposure use. MMWR 1990;39(RR-1):1-14.

v. CDC. Update: Provisional Public Health Service Recommendations for Chemoprophylaxis after Occupational Exposure to HIV. June 7, 1996;45(22):468-72.

vi. OSHA standards – 29 CFR, Respiratory protection for M. tuberculosis. – 1910.139. Personal Protective Equipment.

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APPENDICES

Appendix A	OSHA Regulations (Standards - 29 CFR) Bloodborne pathogens. - 1910.1030
Appendix B	Federal Registers Publication Date: 01/18/2001 Occupational Exposure to Bloodborne Pathogens; Needlestick and Other Sharps Injuries; Final Rule. - 66:5317-5325
Appendix C	Device Evaluation Criteria and Example
Appendix D	Risk determination (1) Position classifications with potential for blood borne pathogen exposure (2) Specific duties /tasks with potential for blood borne pathogen exposure
Appendix E	(1) Appendix E1 Personal Protective Equipment By Task (2) Appendix E2 Personal Protective Equipment By Patient care activities (3) Appendix E3 Personal Protective Equipment By Radiation control field inspections tasks
Appendix F	Training record/forms (1) Training record (2) Sign-in sheet
Appendix G	Hepatitis B declination statements (1) Previously vaccinated (2) General
Appendix H	Post-exposure prophylaxis recommendations (1) Hepatitis B Post-exposure prophylaxis recommendations (2) HIV Post-exposure prophylaxis recommendations
Appendix I	Employer's report of accident form 1101-A
Appendix J	Post-exposure assessment and evaluation Factors to consider in assessment and evaluation Box 2 & Box 3
Appendix K	Contract health care providers by location

Appendix A
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051

Appendix B
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=16265&p_text_version=FALSE

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Appendix C

Report Year _____
Evaluation of *Sharps with Engineered Sharps Injury Protections* (SESIP)

The following information will be reported annually as part of the review and/or update of the Exposure Control Plan. Please provide this information to the ECP Committee chairperson:

Candace Taylor PhD, RN ctaylor@kdhe.state.ks.us
1000 SW Jackson Suite 210
Topeka, KS 66612

- Identify the devices considered for evaluation and identify those actually evaluated (brand name included).
- Has the device being considered for replacement been associated with an injury?
- State what is different between the old and new device.
- Who of the staff did the evaluation(s), the job titles and number of persons in that job.
- How the evaluation was performed, explain the basic plan/implementation of the evaluation.
- State the per unit cost of the old and new device
- State the positive and negative comments about the new device.
- State whether the evaluated device was selected for use or not and why (why not)

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Appendix C

Report Year __2003__

Evaluation of *Sharps with Engineered Sharps Injury Protections* (SESIP)

The following information will be reported annually as part of the review and/or update of the Exposure Control Plan. Please provide this information to the ECP _____

- Identify the devices considered for evaluation and identify those actually evaluated (brand name included).

Abbott syringe with self-sheathing needle

- Has the device being considered for replacement been associated with an injury?
    - *NO, this product is a new design*
- State what is different between the old and new device.
    - *The needle on the previous syringe has to be covered by physically placing the protective device over the needle, The new one is activated without having to put hand/fingers near the needle tip*
- Who of the staff did the evaluation(s), the job titles and number of persons in that job.
    - 3 *DI who draw blood in a clinic setting and* 1 *who primarily does this work in the field*
- How the evaluation was performed, explain the basic plan/implementation of the evaluation.
    - *The employees were supplied 25 syringes to use for a week and then provide feedback about strengths and weaknesses of the device*
- State the per unit cost of the old and new device
    - *Essentially the same price*
- State the positive and negative comments about the new device.
    - *Positive comments are that the device does not require much change in technique or disposal*
    - *Negative comments: "takes some getting used to" , "have to remember to activate the sheath"*
- State whether the evaluated device was selected for use or not and why (why not)
    - *Was decided to change to the new syringe because most of the evaluators felt positively about it and that changing would not incur a substantial change is cost of this product.*

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Appendix D (1)

KDHE Risk Determination Document
Updated:

Employees of the Kansas Department of Health and Environment who occupy the following positions at risk of exposure are:

Organizational Unit	Position Number	Job Class	Risk Class
Neonatal Screening	K0067598	Chemist II	B
	K0057228	Microbiologist III	B
	K0043460	Microbiologist II	B
	K0046750	Lab Tech III	B
	K0052929	Lab Tech. III	B
	K0075787	Sr. Lab Scientist	B
Laboratory Administration	K0108399	Sr. Laboratory Scientist	B
Laboratory Improvement	K0057886	Lab Imp. Spec.	B
	K0176330	Lab. Improvement Spec.	B
	K0176332	Lab. Improvement Spec.	B
	K0047223	Sr. Laboratory Scientist	B
	K0176362	Lab. Improvement Spec.	B
	K0052163	Lab. Improvement Spec.	B
Sample & Data Mgmt.	K0060938	Adm. Assistant	B
	K0064662	Lab Tech. I	B
	K0077304	Sr. Adm. Assistant	B
	K0070294	Adm. Assistant	B
	K0072417	Adm. Assistant	B
	K0041205	Adm. Assistant	B
	K0067624	Sr. Adm. Assistant	B
	K0178880	Lab Tech. II	B
	K0178882	Lab Tech. II	B
Diagnostic Microbiology	K0043472	Microbiologist II	B
	K0051318	Microbiologist II	B
	K0055915	Microbiologist II	B
	K0057008	Microbiologist II	B
	K0057303	Microbiologist II	B
	K0064939	Lab Tech. II	B
	K0070173	Lab Tech. II	B
	K0075967	Microbiologist III	B
	K0044110	Microbiologist II	B
	K0050693	Microbiologist II	B
	K0066437	Pub Service Ex III	B
	K0045696	Lab Tech. II	B
Virology/Serology	K0041873	Microbiologist II	B
	K0046356	Microbiologist III	B
	K0052256	Microbiologist II	B

Appendix D (1)

Organizational Unit	Position Number	Job Class	Risk Class
	K0053670	Lab Tech. III	B
	K0054250	Microbiologist II	B
	K0067815	Microbiologist II	B
	K0076235	Microbiologist I	B
	K0061519	Pub Service Ex III	B
Inorganic Chemistry	K0076713	Chemist III	B
	K0102757	Chemist II	B
	K0072967	Chemist II	B
Bureau for Disease	K0047624	STD DIS	A
Prevention and	K0049976	STD DIS	A
Health Promotion	K0051123	STD DIS	A
	K0115018	STD DIS	A
	K0115017	STD HEPA	B
	K0175647	Imm. Med Investigator	B
	K0178659	TB Med Investigator	B
	K0124678	EPI Health Officer II	B
Office of Local and	K0049202	PHN III	B
Rural Health	K0050952	PHN III	B
	K0053376	PHN III	B
	K0069389	PHN III	B
	K0073126	PHN III	B
Bureau for Children,	K0057982	Nutritionist III	B
Youth and Families	K0069857	Nutritionist II	B
	K0164594	Health Care Professional	B
	K0138343	Nutritionist II	B
	K0146670	PHN III	B
	K0061232	PHN III	B
Bureau of Air	K0050062	Environ. Scientist IV	B
and Radiation	K0111226	Environ. Scientist IV	B
	K0063306	Prog Consultant II	B
	K0064805	Rad. Control Inspt.	B
	K0077758	Rad. Control Inspt.	B
	K0077759	Rad. Control Inspt.	B
	K0109889	Rad. Control Inspt.	B
	K0055825	Rad. Control Inspt.	B
	K0046026	Rad. Protect. Spec.	B
	K0070005	Rad. Protect. Spec.	B

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Appendix D (2) KDHE Risk Determination Document

Explanation of risk duties/tasks

Position	Task
Laboratory	
Sr. Lab Scientist, PSE III	Processing specimens
Chemist I, II, and III	Processing specimens
Lab Tech. I, II, and III	Processing specimens
Microbiologist I, II, III	Processing specimens
Laboratory Improvement Spec.	Potential contact with blood
Adm Asst, Sr. Adm Asst.	Unpacking specimens
Bureau for Disease Prevention and Health Promotion	
Epidemiologist, HEPA	Drawing blood
DIS, Health Officer, Med Invest	Drawing blood
Office of Local and Rural Health	
PHN III	Drawing blood Injections Physical exams
Bureau for Children, Youth and Families	
Nutritionist II	Finger/heel sticks
Nutritionist III	Finger/heel sticks
Health Care Professional	Finger/heel sticks
PHN III	Drawing blood Injections Physical exams
Bureau of Air and Radiation	
Env Scientist IV	Inspection of contaminated medical equipment
Radiation Control Inspt.	Inspection of contaminated medical equipment
Radiation Protection Spec.	Inspection of contaminated Medical equipment
Program Consultant. II	Inspection of contaminated Medical equipment

Appendix E1 Personal Protective Equipment By Task

The following tables list the employee responsibilities for Hand washing and personal protective equipment (PPE) by task.

Laboratory - Listed below are the minimum requirements for controlled situations to protect the health care worker from potentially infectious agents. This list is not all inclusive, so judgement is required on the part of the health care worker to assess the need for additional barrier protection in less controlled situations. If an employee has an area of broken skin on their hands, they are responsible for protecting it through the use of gloves. Sterile technique is to be used during sterile procedures.

	Hand-washing	Gloves	Lab Coat/ Plastic Apron	Mask	Eye Protection
Handling and Processing opened specimens	X	X	X		X
Opening Specimens (without hood or other device)	X	X	X		X
Opening specimens (with hood or other device)	X	X			
Cleaning work surface or spills	X	X	X		X
Processing filter paper blood spots	X	X	X	X	X
Processing lead specimens	X	X	X		X
Contact with leaking package	X	X	X		X

1. For routine procedures, such as histologic and pathologic studies or microbiologic culturing, a biological safety cabinet is not necessary. However, biological safety cabinets (Class I or II) should be used whenever procedures are conducted that have a high potential for generating droplets. These include activities such as blending, sonicating, and vigorous mixing
2. Mechanical pipetting devices should be used for manipulating all liquids in the laboratory. Mouth pipetting is prohibited.
3. Laboratory work surfaces should be decontaminated with an appropriate disinfectant after a spill of blood or other body fluids and when work activities are completed.
4. Contaminated materials and equipment used in laboratory tests should be decontaminated before processing or be placed in bags and disposed of in accordance with institutional policies for disposal of infectious waste.
5. Scientific equipment that has been contaminated with blood or other body fluids should be decontaminated and cleaned before being repaired in the laboratory or transported elsewhere.

Appendix E1 (cont.)

6. All persons should wash their hands after completing laboratory activities and should remove protective clothing before leaving the laboratory.
7. Gloves should be removed when leaving work areas.
8. Computer terminals with plastic overlays can be used with gloves, but must be wiped down with a 10% bleach solution once during the shift, at the end of the shift, and as needed.
9. If telephones are answered with gloves on, protect receiver with a paper towel.

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Appendix E2 Personal Protective Equipment By Patient care activities

Patient care activities - Listed below are the minimum requirements for controlled situations to protect the health care worker from potentially infectious agents. This list is not all inclusive, so judgement is required on the part of the health care worker to assess the need for additional barrier protection in less controlled situations. If an employee has an area of broken skin on his hands, the employee is responsible for protecting it through the use of gloves. Sterile technique is to be used during sterile procedures.

	Hand-washing	Gloves	Lab Coat/ Plastic Apron	Mask	Eye Protection
Clean-up of an incontinent patient	X	X	S		
Cleaning surfaces of blood or other body fluids	X	X			
Collecting stool, urine, sputum, or wound specimens	X	X			
Direct contact with patient with forceful or productive cough	X			X	P
CPR with device	X	X			
Drawing field bloods	X	X			
Finger or heel sticks	X	X			
Medication administration: Orally	X				
Medication administration: IV piggyback	X				
Medication administration: IV starts	X	X			
Medication administration: IV, direct into hub of catheter	X	X			
Physical assessment	X				
Vital signs (not including rectal temperature)	X				
Vital signs (including rectal temperature)	X	S			
Dressing change: burns	X	X	S		
Dressing change: large amount of drainage	X	X	S		
Dressing change: routine	X	X			

Legend: **X** = Routinely **S** = If soiling is likely **P** = If splattering is likely

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Appendix E3 Personal Protective Equipment By Radiation control field inspections tasks

Radiation control field inspections tasks and PPE for radiation control - Listed below are the minimum requirements recommended during controlled situations, to protect radiation control staff from potentially infectious agents. This list is not all inclusive, so judgement is required on the part of staff to assess the need for additional barrier protection in less controlled situations. If an employee has an area of broken skin on their hands, they are responsible for protecting it through the use of gloves.

	Hand-washing	Gloves	Gowns
Swipe sample collection	X	X	
Survey or search of used needles	X	X	
Monitoring radiation in x-ray suite where blood or body fluids are present and operator treats as controlled area	X	X	
Responding to an incident where radiation materials and blood or OPIM have mixed together	X	X	S

Legend: **X** = Routinely **S** = If soiling is likely

1. For routine procedures, such as x-ray machine surveys using test stands or monitoring radiation levels in nuclear medicine suites, care should be taken to insure that the equipment is not placed in or on surfaces that are wet. If surveys must be done on such surfaces and the operation is one that can produce potentially infectious agents, then the equipment should be bagged or covered as much as possible and the barrier materials disposed at the site in the correct manner.
2. Liquid samples should not be collected using mouth pipetting.
3. Contaminated equipment and samples or sample containers will be decontaminated before processing or be placed in bags and disposed in accordance with institutional policies for the disposal of such wastes.
4. Scientific equipment (survey meters, test stands, etc) that have been contaminated with blood or other body fluids should be decontaminated and cleaned before being repaired or transported to the manufacturer.
5. All surveyors should wash their hands after completing a survey in a medical laboratory or dental facility.
6. If protective clothing or shoe covers are required, these shall be removed and collected in bags for disposal in the same manner as those potentially contaminated with radioactive materials.
7. Gloves shall be removed when leaving work areas, using the techniques for removing gloves contaminated with radioactive materials.

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Appendix F (1) **Training record/forms**

Kansas Department of Health and Environment

Employee Training for Blood Borne Pathogens

Date _____

Bureau _____

Instructors _____

_____

Objectives:

Participants will be able to discuss and follow the requirements for the Kansas Department of Health and Environment exposure control plan based on the OSHA Blood Borne Pathogens Final Rule, 29 CFR Part 1910.1030.

The areas covered are:

A. Overview of OSHA standard for blood borne pathogens and location of the standard and exposure control plan.

B. Epidemiology and symptoms of blood borne pathogens.

C. Modes of transmission of blood borne pathogens.

D. KDHE exposure control plan and the means by which employees can obtain a copy of the plan.

E. Procedures which may involve exposure to blood and OPIM.

F. Control measures to prevent exposure to blood and OPIM including engineering controls, work practices, and PPE.

G. Information on the types, selection, proper use, location, removal, handling, decontamination and disposal of PPE.

H. Preexposure hepatitis B vaccination including information on vaccine efficacy, safety, method of administration, and benefits of being vaccinated.

I. Postexposure reporting, medical evaluation, and follow-up.

J. Hazardous labels and signs used by KDHE.

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Appendix F (2) **Training record/forms**

Participant Sign-in Sheet

Name	Job Title	Bureau	KIPPS Number

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Appendix G (1)

Kansas Department of Health and Environment

Hepatitis B Vaccine Declination Statement (Previously Vaccinated)

I understand that due to my occupational exposure to blood or other potentially infectious materials that I may be at risk of acquiring hepatitis B virus infection. I have been given the opportunity to be vaccinated with the hepatitis B vaccine at no charge. I decline the hepatitis B vaccine at this time because I received the complete hepatitis B vaccine series in the past.

Employee's name _____

Employee's signature _____

Bureau/Office _____

Date _____

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Appendix G (2)

Kansas Department of Health and Environment

Hepatitis B Vaccine Declination Statement (General)

I understand that due to my occupational exposure to blood or other potentially infectious materials that I may be at risk of acquiring hepatitis B virus infection. I have been given the opportunity to be vaccinated with the hepatitis B vaccine at no charge. I decline the hepatitis B vaccine at this time. I understand that by declining this vaccine, I may continue to be at risk of acquiring hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I wish to be vaccinated with hepatitis B vaccine, I may receive the vaccination series at no charge to me.

Employee's name _____

Employee's signature _____

Bureau/Office _____

Date _____

Appendix H1 Hepatitis B Post-exposure prophylaxis recommendations

TABLE 3. Recommended postexposure prophylaxis for exposure to hepatitis B virus

Vaccination and antibody response status of exposed workers*	Treatment		
	Source HBsAg† positive	Source HBsAg† negative	Source unknown or not available for testing
Unvaccinated	HBIG§ x 1 and initiate HB vaccine series¶	Initiate HB vaccine series	Initiate HB vaccine series
Previously vaccinated			
Known responder**	No treatment	No treatment	No treatment
Known nonresponder††	HBIG x 1 and initiate revaccination or HBIG x 2§§	No treatment	If known high risk source, treat as if source were HBsAg positive
Antibody response unknown	Test exposed person for anti-HBs¶¶ 1. If adequate,** no treatment is necessary 2. If inadequate,†† administer HBIG x 1 and vaccine booster	No treatment	Test exposed person for anti-HBs 1. If adequate,¶ no treatment is necessary 2. If inadequate,¶ administer vaccine booster and recheck titer in 1–2 months

* Persons who have previously been infected with HBV are immune to reinfection and do not require postexposure prophylaxis.

† Hepatitis B surface antigen.

§ Hepatitis B immune globulin; dose is 0.06 mL/kg intramuscularly.

¶ Hepatitis B vaccine.

** A responder is a person with adequate levels of serum antibody to HBsAg (i.e., anti-HBs ≥10 mIU/mL).

†† A nonresponder is a person with inadequate response to vaccination (i.e., serum anti-HBs < 10 mIU/mL).

§§ The option of giving one dose of HBIG and reinitiating the vaccine series is preferred for nonresponders who have not completed a second 3-dose vaccine series. For persons who previously completed a second vaccine series but failed to respond, two doses of HBIG are preferred.

¶¶ Antibody to HBsAg.

Appendix H2 HIV Post-exposure prophylaxis recommendations

TABLE 4. Recommended HIV postexposure prophylaxis for percutaneous injuries

	Infection status of source				
Exposure type	**HIV-Positive Class 1***	**HIV-Positive Class 2***	**Source of unknown HIV status†**	**Unknown source§**	**HIV-Negative**
Less severe¶	Recommend basic 2-drug PEP	Recommend expanded 3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP** for source with HIV risk factors††	Generally, no PEP warranted; however, consider basic 2-drug PEP** in settings where exposure to HIV-infected persons is likely	No PEP warranted
More severe§§	Recommend expanded 3-drug PEP	Recommend expanded 3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP** for source with HIV risk factors††	Generally, no PEP warranted; however, consider basic 2-drug PEP** in settings where exposure to HIV-infected persons is likely	No PEP warranted

* HIV-Positive, Class 1 — asymptomatic HIV infection or known low viral load (e.g., <1,500 RNA copies/mL). HIV-Positive, Class 2 — symptomatic HIV infection, AIDS, acute seroconversion, or known high viral load. If drug resistance is a concern, obtain expert consultation. Initiation of postexposure prophylaxis (PEP) should not be delayed pending expert consultation, and, because expert consultation alone cannot substitute for face-to-face counseling, resources should be available to provide immediate evaluation and follow-up care for all exposures.

† Source of unknown HIV status (e.g., deceased source person with no samples available for HIV testing).

§ Unknown source (e.g., a needle from a sharps disposal container).

¶ Less severe (e.g., solid needle and superficial injury).

** The designation "consider PEP" indicates that PEP is optional and should be based on an individualized decision between the exposed person and the treating clinician.

†† If PEP is offered and taken and the source is later determined to be HIV-negative, PEP should be discontinued.

§§ More severe (e.g., large-bore hollow needle, deep puncture, visible blood on device, or needle used in patient's artery or vein).

(Tables and Figures from MMWR "Updated U.S. public health service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis", June 29, 2001; Vol. 50(RR11), 1-42)

10/16/03

Appendix I Employer's report of accident form 1101-A

(Found at http://da.state.ks.us/ps/subject/workcomp.htm)

DIVISION OF WORKERS COMPENSATION
KS DEPT OF HUMAN RESOURCES
800 SW JACKSON ST STE 600
TOPEKA KS 66612-1227

EMPLOYER'S REPORT OF ACCIDENT

Submit original report only

OSHA CASE OR FILE NUMBER

There is a $250 penalty for failure to file Accident Reports within 28 days of the employer's receipt of knowledge of the accident.

DO NOT WRITE IN THIS SPACE

READ INSTRUCTIONS BEFORE FILLING IT OUT.

1. Federal Employers Identification Number 486029925
2. Name of Employer _____ Telephone Number _____
3. Mailing Address _____ (Street, City, State, Zip Code)
4. Location, if different from mailing address _____ (Street, City, State, Zip Code)
5. Nature of Business _____ S.I.C. Code 9199 Dept. or Division _____
6. Name of Employee _____ (First, Middle, Last) Age ____ Sex ____
7. Home Address _____ (Street, City, State, Zip Code)
8. Soc. Sec. # _____ Birth Date _____ Employee's Occupation _____ Home Phone Number _____
9. Date of Injury or Occupational Disease _____ Time of Injury _____ AM/PM
   Date Disability Began _____ Gross Average Weekly Wage $ _____
10. Place of Accident or Last Exposure _____ (City, County, State)
11. Was accident or last exposure on employer's premises? ☐ YES ☐ NO
12. How did accident occur? _____
13. What was employee doing when injured? _____
14. Name substance or object that directly caused injury _____
15. Describe in detail nature and extent of injury, indicate part of body involved _____
16. Was worker admitted to hospital? ☐ YES ☐ NO Date _____ Treated by emergency room only? ☐ YES ☐ NO
    Hospital name & address _____
17. Name and address of attending physician or clinic _____
18. Has employee returned to regular duty ? ☐ YES ☐ NO Light Duty? ☐ YES ☐ NO Date _____
19. Is compensation now being paid? ☐ YES ☐ NO Date first/initial payment _____
20. Weekly compensation rate $ _____ Is further medical aid needed? ☐ YES ☐ NO ☐ UNKNOWN
21. Did employee die? ☐ YES ☐ NO If so, give date of death _____ (File amended report within 28 days if death subsequently occurs.)
22. Name and address of dependents (death cases only) _____
23. Insurance Carrier and Third Party Administrator State Self-Insurance Fund 785296-2364
    Address 900 SW JACKSON ST ROOM 951 TOPEKA, KANSAS 66612-1251 (Street, City, State, Zip Code, Phone)
    Policy Number _____ Name of Agent _____
    Claim Number _____ Name of Claim Representative _____
24. Date of Report _____ Completed by _____ Title _____

DO NOT WRITE IN THIS SPACE

AGE

OD Y N

CAUSE

NATURE

SEVERITY
0 NOTIME LOST
1 TIME LOST
2 MEDICAL
3 FATAL

SOURCE

MEMBER

Questions or comments can be directed to the Kansas Division of Workers Compensation, Topeka, KS - Phone: 1-800-332-0353

K-WC 1101-A(REV. 1-02) - SUBMISSION DOES NOT CONSTITUTE ADMISSION OF LIABILITY -

Appendix J Post-exposure assessment and evaluation

Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis, MMWR June/29/2001, Vol. 50(RR11); 1-42.

Factors to consider in assessment and evaluation

BOX 2. Factors to consider in assessing the need for follow-up of occupational exposures

- **Type of exposure**
  - Percutaneous injury
  - Mucous membrane exposure
  - Nonintact skin exposure
  - Bites resulting in blood exposure to either person involved
- **Type and amount of fluid/tissue**
  - Blood
  - Fluids containing blood
  - Potentially infectious fluid or tissue (semen; vaginal secretions; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids)
  - Direct contact with concentrated virus
- **Infectious status of source**
  - Presence of HBsAg
  - Presence of HCV antibody
  - Presence of HIV antibody
- **Susceptibility of exposed person**
  - Hepatitis B vaccine and vaccine response status
  - HBV, HCV, and HIV immune status

BOX 3. Evaluation of occupational exposure sources

Known sources

- Test known sources for HBsAg, anti-HCV, and HIV antibody
  - Direct virus assays for routine screening of source patients are **not** recommended
  - Consider using a rapid HIV-antibody test
  - If the source person is **not** infected with a bloodborne pathogen, baseline testing or further follow-up of the exposed person is **not** necessary
- For sources whose infection status remains unknown (e.g., the source person refuses testing), consider medical diagnoses, clinical symptoms, and history of risk behaviors
- Do not test discarded needles for bloodborne pathogens

Unknown sources

- For unknown sources, evaluate the likelihood of exposure to a source at high risk for infection
  - Consider likelihood of bloodborne pathogen infection among patients in the exposure setting

Appendix K

(Location http://da.state.ks.us/ps/subject/workcomp.htm)

The State Self Insurance Fund has designated medical care providers in certain areas. To receive authorized medical treatment, injured employees must be seen at these facilities (if within their area). In locations that do not have managed care facilities the employee should be seen by their primary care physician.

Topeka:
St. Francis Hospital & Medical Center
1700 SW 7th Street
Topeka, KS 66606
(785) 295-8000

Kansas City:
University of Kansas Hospital Authority
3901 Rainbow Blvd.
Kansas City, KS 66160
(913) 588-5000

Kansas City:
KU Med West
7405 Renner Road
Shawnee, KS 66217
(913) 588-8400

Lawrence:
Lawrence Memorial Hospital
325 Maine Street
Lawrence, KS 66044
(785) 749-6100

Manhattan:
Mercy Health Center
1823 College Ave.
Manhattan, KS 66502
(785) 776-3300

Wichita:
Wichita Clinic
901 S. George Washington Blvd.
Wichita, KS 67208
(316) 264-6555